



Seven Los Alamos scientists honored as APS Fellows

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Fontes, Htoon, Kawano, Lewellen, Smilowitz, Trugman and Zapf noted for career accomplishments

LOS ALAMOS, N.M., Oct. 26, 2017—Seven scientists at Los Alamos National Laboratory were tapped this year as new Fellows of the American Physical Society (APS), a significant honor for the Laboratory and its people. The honorees are Christopher J. Fontes, Han Htoon, Toshihiko Kawano, John W. Lewellen, Laura Beth Smilowitz, Stuart A. Trugman and Vivien Zapf.

“Selection as American Physical Society fellows reflects the vibrant engagement that Los Alamos scientists have with the larger scientific community,” said Laboratory Director Charlie McMillan. This year, as Los Alamos saw the admission of seven scientists into APS, Director McMillan noted, “I am proud of the contributions Los Alamos scientists bring to professional societies through papers, scientific conference attendance and other professional interactions. Collaboration and the exchange of ideas through affiliations within societies such as APS play an important role in furthering the scientific innovation required to accomplish our national-security mission.”

APS nominations are evaluated by the Fellowship Committee of the appropriate APS division, topical group or forum, or by the APS General Fellowship committee. After review by the full APS Fellowship Committee, the successful candidates are elected by the APS Council.

About the new Los Alamos fellows:

Christopher J. Fontes, of X Computational Physics Division: For pioneering contributions to our understanding of atomic processes in plasmas and their application to a broad range of physics problems including nuclear fusion, laboratory experiment and astrophysics. Nominated in the APS Division of Atomic, Molecular & Optical Physics.

Han Htoon, of the Center for Integrated Nanotechnologies: For pioneering accomplishments in development of single nanostructure, optical spectroscopy/imaging techniques, elucidating fundamental/quantum optical processes of quantum dots and single wall carbon nanotubes, and device integration of optical nanomaterials. Nominated in the Division of Chemical Physics.

Toshihiko Kawano, of Theoretical Division: For significant contributions to the development of nuclear reaction theories in low-energy physics, their implementation in widely used nuclear reaction codes and their application to the production of evaluated nuclear data for neutron transport simulations for basic and applied science. Nominated in the APS Division of Nuclear Physics.

John W. Lewellen, of Accelerator Operations and Technology Division: For leadership and contributions to the development of practical, high-power superconducting RF photocathode guns, including the development of novel RF cavity designs. Nominated in the Division of APS Physics of Beams.

Laura Beth Smilowitz, of Chemistry Division: For pioneering radiography to study thermal explosions, including the development of both a scaled tabletop dynamic radiographic facility capable of producing continuous X-ray movies of high-speed events and the triggering techniques required to observe the spontaneous onset of a thermal explosion. Nominated in the APS Topical Group on Shock Compression of Condensed Matter.

Stuart A. Trugman, of Theoretical Division: For outstanding and original contributions to polaron physics, quantum Hall effect, far from equilibrium phenomena, disorder and superconductivity. Nominated in the APS Division of Condensed Matter Physics.

Vivien Zapf, of Materials Physics and Applications Division: For seminal contributions to the understanding of quantum mechanical properties of superconductors, quantum magnets and multiferroic systems at low temperatures and in extreme magnetic fields to 100T. Nominated in the APS Topical Group on Magnetism.

About the [American Physical Society](#)

The American Physical Society is a non-profit membership organization working to advance and diffuse the knowledge of physics through its outstanding research journals, scientific meetings, and education, outreach, advocacy and international activities. APS represents more than 50,000 members, including physicists in academia, national laboratories and industry in the United States and throughout the world.

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